

Date: Tuesday, 3/20/2007 1:48:03 PM
 User: Kim Johnston

Process Sheet

| | | | |
|-----------------------|--|------------------|------------------------------------|
| Customer | : CU-DAR001 Dart Helicopters Services | Drawing Name | : 212/205 HIGH FED X-TUBE ASSEMBLY |
| Job Number | : 31355 | | |
| Estimate Number | : 10254 | | |
| P.O. Number | : <u>N/A</u> | Part Number | : D212664101 |
| This Issue | : 3/20/2007 | S.O. No. | : <u>N/A</u> |
| Prsht Rev. | : NC | Drawing Number | : D212-664-141 REV. <u>B</u> |
| First Issue | : <u>N/A</u> | Project Number | : N/A |
| Previous Run | : 31354 | Drawing Revision | : <u>8C</u> |
| | | Material | : <u>N/A</u> |
| | | Due Date | : 4/15/2007 |
| Written By | : | Qty: | 1 Um: Each |
| Checked & Approved By | : <u>07.03.20</u> | | |
| Comment | : Est Rev: E 04.02.16 Reformat KJ/DS Est Rev: F 06-03-29 Remove Comments on Pick List JLM | | |

Additional Product

Job Number:



| | | |
|---------|-----------------------|--------------|
| Seq. #: | Machine Or Operation: | Description: |
|---------|-----------------------|--------------|

| | | |
|-----|----|------------------|
| 1.0 | DC | DOCUMENT CONTROL |
|-----|----|------------------|



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D212-664-101CHG002

| | | |
|-----|----------|--------------------|
| 2.0 | D6005128 | Crosstube material |
|-----|----------|--------------------|



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D6005-128 Crosstube 26549

Check OD = 2.750"; ID = 2.000"

MS 07/04/05 1

| | | |
|-----|------------|----------------------------|
| 3.0 | MORI SEIKI | MORI SEIKI CNC LATHE LARGE |
|-----|------------|----------------------------|



Comment: MORI SEIKI CNC LATHE LARGE

1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA113

2-Turn first side as per Folio FA113

3-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D212-664-141.

MS 07/04/05 1

| | | |
|-----|-----|------------------------------|
| 4.0 | QC1 | INSPECT ALL DIM TO DIM SHEET |
|-----|-----|------------------------------|



Comment: INSPECT ALL DIM TO DIM SHEET

MS 07/04/05 1

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212/205 HIGH FED X-TUBE ASSEMBLY

Job Number: 31355

Part Number: D212664101

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

MORI SEIKI

MORI SEIKI CNC LATHE LARGE



Comment: MORI SEIKI CNC LATHE LARGE

1-Turn second side as per Folio FA113

2-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D212-664-141.

JP 07/04/08

6.0

QC1

INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

JP 07/04/08

7.0

QC8

SECOND CHECK



Comment: SECOND CHECK

JP 07/04/08

8.0

MORI SEIKI

MORI SEIKI CNC LATHE LARGE



Comment: MORI SEIKI CNC LATHE LARGE

1-Remove sand and plugs

2-Scribe part # and batch # using vibrating stylus as per Dwg D212-664-141

JP 07/04/08

9.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Polish entire outside surface of crosstube

JP 7-4-10

10.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

JP 7-4-10

11.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

JP 7-4-10

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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QA: N/C Closed: _____ Date: _____

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Drawing Name: 212/205 HIGH FED X-TUBE ASSEMBLY

Job Number: 31355

Part Number: D212664101

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

QC18

DIMENSIONAL CHECK OF X-TUBES



20705-03 @



Comment: DIMENSIONAL CHECK OF X-TUBES

13.0

BENDING

BENDING MACHINE



Comment: BENDING MACHINE

Bend tube as per Dwg D212-664-141 using CNC bender program 212-fw and Folio FT015

EL 7-5-1

14.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Drill pilot holes in tube as per Dwg D212-664-141 using drill Jig DT8548 & DT8549

2-Ream hole to finish size in tube as per Dwg D212-664-141 using drill Jig DT8548 & DT8549. Check dimensions between holes, both sides on both cuffs, to ensure alignment with saddle holes.

3-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D212-664-141

3 DP
2-5-29
JB 7-5-30

15.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1 within 24 hours of bending and drilling

JB 7-5-30

16.0

QC5

INSPECT WORK TO CURRENT STEP



20705-31 @



Comment: INSPECT WORK TO CURRENT STEP

17.0

OUTSIDE SERVICE

OUTSIDE SERVICES



Comment: Sub-Contracting OUTSIDE SERVICES

Liquid Penetrant Inspection as per QSI 038

Issue P/O: 3878

LPI as per ASTM 1417 Level 2

Attach copy of NDT results to work order

207105131 @

18.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Inspect for transit damage Ensure copy of NDT results attached to work order.

207105131 @

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212/205 HIGH FED X-TUBE ASSEMBLY

Job Number: 31355

Part Number: D212664101

Job Number:



Seq. #:

Machine Or Operation:

Description :

19.0

QC6

DIMENSIONAL CHECK



Job 12 @



Comment: Inspect for damage & ensure results are as per Dwg D212-664-141

20.0

SPRAY PAINTING

SPRAY PAINTING



Comment: SPRAY PAINTING

1-Prime inside and outside crosstube as per QSI 005 4.2

2-Paint outside crosstube with White Imron as per QSI 005 4.2

37 07-0672

21.0

QC14

Inspect Spray Paint



Job 13 @



Comment: Inspect Spray Paint

Then, Wrap in plastic bag to protect from scratches

22.0

~~D2856600~~

Abrasion Strip



Comment: Qty.: 0.7090 f(s)/Unit Total: 0.7090 f(s) *A/R*

Pick:

Qty Part number Description Batch

2 ~~D2856 600 851~~ Abrasion Strip

Magna bond. M103628

37 07 07 04

23.0

D28931

Support



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D2893-1 Support

B29524

37 07-07-04

24.0

MS2192024

Clamp(per MIL-DTL-8783C)



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Pick:

Qty Part number Description Batch

4 MS21920-25 Clamp

~~103897~~

103897

37 07-07-04

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212/205 HIGH FED X-TUBE ASSEMBLY

Job Number: 31355

Part Number: D212664101

Job Number:



Seq. #:

Machine Or Operation:

Description :

25.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Install abrasion strips as per QSI 035 using DT8581

N/A

2-APPLY magnablen to supports

per dwg. 2-Install supports and clamps as per Dwg D212-664-141. Torque clamps to 80-100 in lb.

8T
07-06-26

26.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07/07/07 (X1)

27.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

28.0

D34281

Placard



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

PLACARD

Batch: 1326249 ✓

29.0

AN635A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bolt

Batch: M101697 ✓

30.0

AN636A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bolt

Batch: M102929 ✓

31.0

AN960JD616

Washer



Comment: Qty.: 18.0000 Each(s)/Unit Total : 18.0000 Each(s)

Washer

Batch: M103641 ✓

7/7/550

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: ☒ Date: 11/07/16
 QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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Drawing Name: 212/205 HIGH FED X-TUBE ASSEMBLY

Job Number: 31355

Part Number: D212664101

Job Number:



Seq. #:

Machine Or Operation:

Description :

32.0

MS21042L6

Nut



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Nut

Batch: M101660

7/2/5 SP

33.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

C2671071050

34.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Identify and pack for shipping as per PPP D212-664-101

REV-C

SP 507/07/050

35.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

127K7K16

Job Completion



U 57-07-06

D212 664 101 B 31355

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

| | | |
|---|---------------------|--------------|
| DART AEROSPACE LTD | Work Order: | 31355 |
| Description: Crosstube Assembly (205/212/412 High Fwd) | Part Number: | D212-664-141 |
| Inspection Dwg: D212-664-141 Rev: B | | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

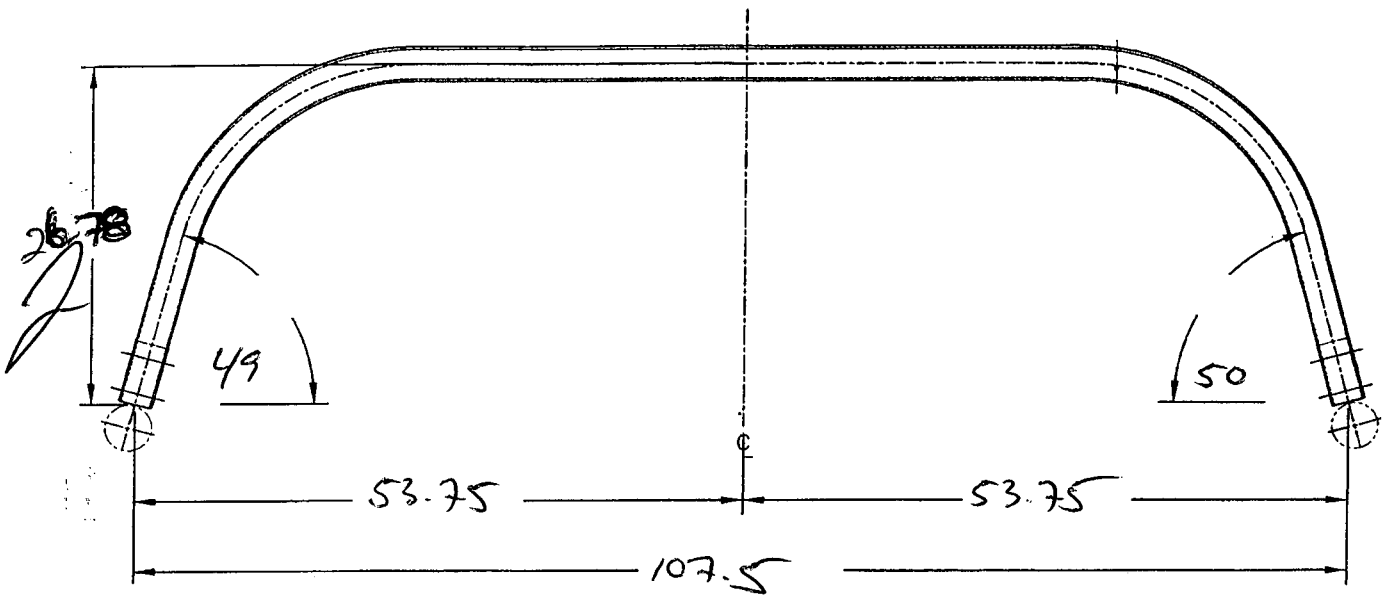
| | Inspection Sheet Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|--------|---------------------------------------|---------------|---------------------|--------|--------|-------------------------|----------|
| SIDE A | 0.200 | +/-0.010 | .200 | ✓ | | | |
| | R0.063 | +/-0.010 | .063 | ✓ | | | |
| | 2.740 | +0.005/-0.000 | 2.743 | ✓ | | | |
| | 5.097 | +/-0.030 | 5.097 | ✓ | | | |
| | 2.304 | +0.005/-0.000 | 2.304 | ✓ | | | |
| | 2.340 | +0.005/-0.000 | 2.341 | ✓ | | | |
| | 2.398 | +0.005/-0.000 | 2.398 | ✓ | | | |
| | 2.448 | +0.005/-0.000 | 2.449 | ✓ | | | |
| | 2.498 | +0.005/-0.000 | 2.498 | ✓ | | | |
| | 2.549 | +0.005/-0.000 | 2.549 | ✓ | | | |
| | 2.599 | +0.005/-0.000 | 2.599 | ✓ | | | |
| | 2.671 | +0.005/-0.000 | 2.672 | ✓ | | | |
| | 2.701 | +0.005/-0.000 | 2.701 | ✓ | | | |
| | | | | | | | |
| SIDE B | 0.200 | +/-0.010 | .200 | ✓ | | | |
| | R0.063 | +/-0.010 | .063 | ✓ | | | |
| | 2.740 | +0.005/-0.000 | 2.740 | ✓ | | | |
| | 5.097 | +/-0.030 | 5.097 | ✓ | | | |
| | 2.304 | +0.005/-0.000 | 2.305 | ✓ | | | |
| | 2.340 | +0.005/-0.000 | 2.341 | ✓ | | | |
| | 2.398 | +0.005/-0.000 | 2.400 | ✓ | | | |
| | 2.448 | +0.005/-0.000 | 2.448 | ✓ | | | |
| | 2.498 | +0.005/-0.000 | 2.498 | ✓ | | | |
| | 2.549 | +0.005/-0.000 | 2.549 | ✓ | | | |
| | 2.599 | +0.005/-0.000 | 2.599 | ✓ | | | |
| | 2.671 | +0.005/-0.000 | 2.671 | ✓ | | | |
| | 2.701 | +0.005/-0.000 | 2.701 | ✓ | | | |
| | 126.51 | +/-0.020 | 126.51 | | | | |

| | | | | | |
|---------------------|----------|--------------------|----------|----------------------------|-----|
| Measured by: | MS/JS | Audited by: | Sn | Prototype Approval: | N/A |
| Date: | 07/04/05 | Date: | 07/04/05 | Date: | N/A |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|--|------------|----------|
| A | 05.04.27 | New Issue (P/O D412-664-101) | KJ/JLM | |
| B | 06.03.15 | Tolerance revised for 5.097 per Dwg Rev update | KJ/JLM | |

| | | | |
|---|--|--------------|--------------|
| DART AEROSPACE LTD | | Work Order: | 31355 |
| Description: Crosstube High Fwd (205/212/412) | | Part Number: | D212-664-101 |
| Inspection Dwg: D212-664-141 Rev: B | | Page 1 of 1 | |

| Required Dimension | Min | Max |
|--------------------|--------|--------|
| Height | 26.86 | 26.98 |
| 1/2 Span | 53.66 | 53.78 |
| Angle | 49 | 52 |
| Total Span | 107.32 | 107.56 |



| Comments |
|--------------------------|
| height is perfectly even |
| |
| |
| |

| | |
|-----------------|--------------------|
| QC15 Inspection | <i>[Signature]</i> |
| Date | |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|-----------|--------------------------|--------------------|
| A | 07.02.06 | New Issue | KJ/JM <i>[Signature]</i> | <i>[Signature]</i> |



| | | | |
|------------------|----------------|--|------------------------|
| DESIGN PH | DRAWN BY PH | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED PH | APPROVED PH | DRAWING NO. D212-664-141 | REV. B SHEET 1 OF 3 |
| DATE 05.02.04 | | TITLE XTUBE ASS'Y (205/212/412 HI FWD) NTS | |
| A | 00.12.12 | NEW ISSUE | |
| B | 05.02.04 | ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES | |

RELEASED
05.06.09

UNDER REVIEW

07.03.03 PH

REVISE TO ADD
MANUFACTURE AND FINISH

OK
07.03.00
PH

| Qty | Part Number | Description |
|-----|---------------|---|
| X | D212-664-141 | CROSSTUBE ASSEMBLY (205/212/412 HIGH FWD) |
| 1 | D6005-128 | CROSSTUBE |
| 2 | D2893-1 | SUPPORT |
| 2 | D2856-600-851 | ABRASION STRIP |
| 4 | MS21920-24 | CLAMP |

GENERAL NOTES:

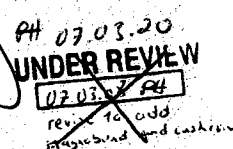
- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 2) MATERIAL: MANUFACTURED FROM D6005-128
FINISHED LENGTH = 128.51±0.020
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 4) PART IS SYMMETRIC ABOUT CENTERLINE.
- 5) RUN-OFF PART. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 6) BEND PROGRESSIVELY WITH A MINIMUM OF 3 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 7) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 8) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS
- 9) INSTALL D2856-600-851 ABRASION STRIP WITH A 0.13 (REF) GAP ON BOTTOM SIDE OF CROSSTUBE, CENTERED OPPOSITE D2893-1 SUPPORT, PER QSI 035.
- 10) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 11) IT IS OPTIONAL TO SEAL EDGES OF SUPPORTS USING SIKAFLEX-241/291 SEALANT.
- 12) TORQUE CLAMPS 80 TO 100 IN-LB.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 31355

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RELEASED
95-60-04



2.549*

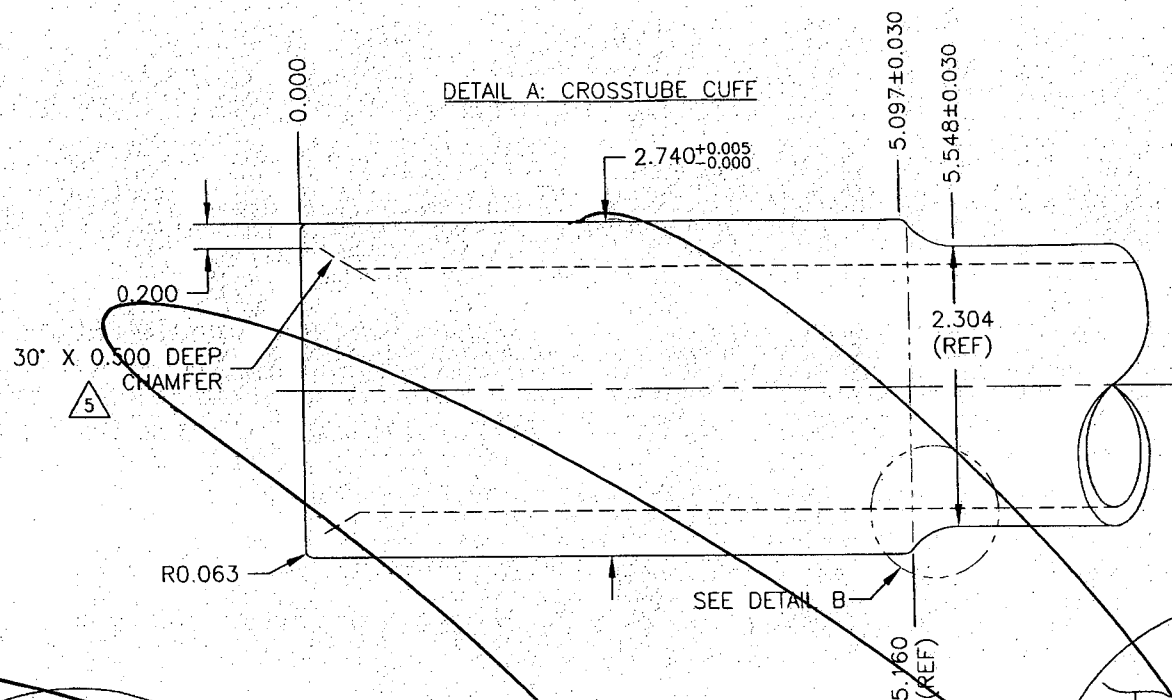
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SUBJECT TO AMENDMENT
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WORK ORDER
NO. 31355

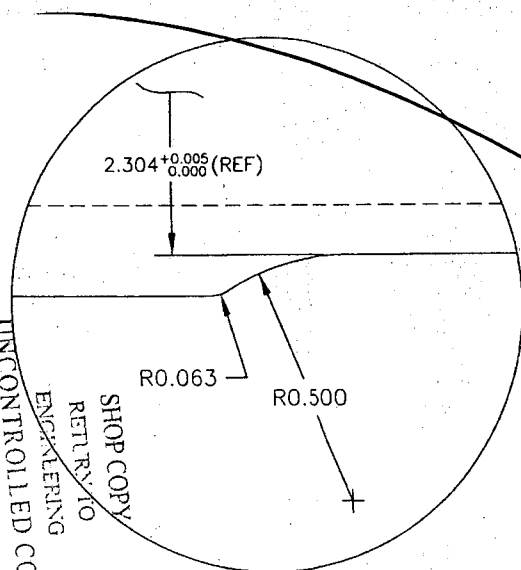
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| | PH CHECKED  | PH APPROVED  | | DRAWING NO. D212-664-141 | REV. B SHEET 2 OF 3 |
| | DATE 05.02.04 | TITLE XTUBE ASS'Y (205/212/412 HI FWD) | | SCALE 1:10 | |



RELEASED
05.02.04

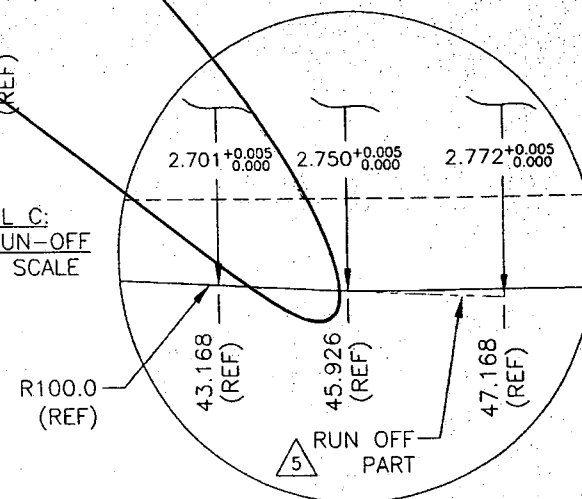


PH 07.05.20
UNDER REVIEW
07.03.02 PH
Review to add
material and cushion



DETAIL B: CUFF
TRANSITION
SCALE 4:1

DETAIL C:
TAPER RUN-OFF
NOT TO SCALE



NO.

WORK ORDER
31358

WITHOUT NOTICE

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ENGINEERING

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R0.063

R0.500

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| DESIGN | PH | DRAWN BY | PH | DART | DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA |
| CHECKED | # | APPROVED | # | DRAWING NO. | REV. B |
| DATE | 05.02.04 | TITLE | XTUBE ASS'Y (205/212/412 HI FWD) | D212-664-141 | SHEET 3 OF 3 |
| | | SCALE | 1:1 | | |



HeathAir

INTERNATIONAL (1991) INC.

681 Ave. Lepine, Dorval, Québec H9P 1G3
Tél.: (514) 636-1000 • Fax: (514) 636-0031

W.O. N° 36547

A.M.O. Number: 46/90

NON-DESTRUCTIVE TESTING REPORT

AIRCRAFT / COMPONENT INFORMATION

REGISTRATION:

MODEL/TYPE:

SERIAL NUMBER:

TOTAL HR/LDG:

OPERATED BY:

BASED AT:

INSPECTION REQUIREMENTS

Carry out FPI of (6) cross tubes (external surface) as per ASTM E-1417-05 and the Dart QSI 038, Section 4.1.1 (on file at client) - parts delivered to HeathAir.

Qty (5) P/N D212-664-101 S/N's B31354, B31355, B31353, B31357 and B31352.

Qty (1) P/N D212-664-201 S/N B31361.

☐ RADIOGRAPHY

☐ ULTRASONIC

☒ PENETRANT

☐ MAGNETIC PARTICLE

☐ EDDY CURRENT

INSPECTION REPORT

Fluorescent penetrant inspection was performed in accordance with the above requirements on (6) cross tubes.

Note: A Level 3 penetrant was substituted for the requested Level 2 (3 is more sensitive)
Ardrox 970P25E Batch #04B503.

(6) cross tubes inspected. (6) PASSED / (0) FAILED.

THE MAINTENANCE DESCRIBED ABOVE HAS BEEN PERFORMED IN ACCORDANCE WITH
THE APPLICABLE STANDARDS OF AIRWORTHINESS

INSPECTED BY:

DATE June 1, 2007

INSPECTION
STAMP(S)

CUSTOMER INFORMATION

CUSTOMER: Dart Aerospace

P.O. NUMBER

PO 0003878

ADDRESS:

CONTACT NAME:

Linda Lacelle

LABOUR

@

\$

MATERIALS

@

TRAVEL EXPENSES

@

GST

HOTEL EXPENSES

@

PST

INVOICE NO.

TOTAL \$

WHITE COPY - INSPECTION FILE • YELLOW COPY - CUSTOMER • PINK COPY - ACCOUNTANT



| | | | |
|----------------------|--------------------------------|---|------------------------|
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| CHECKED QP | APPROVED [Signature] | DRAWING NO. D212-664-141 | REV. C SHEET 1 OF 3 |
| DATE 07.03.08 | | TITLE XTUBE ASS'Y (205/212/412 HI FWD) NTS | |
| A | 00.12.12 | NEW ISSUE | |
| B | 05.02.04 | ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES | |
| C | 07.03.08 | REMOVE -851 ABRASION STRIP; ADD MAGNOBOND 6398, CUSHION, REVERSE CLAMPS | |

RELEASED
07.04.24 **[Signature]**

| Qty | Part Number | Description |
|-----|----------------|---|
| X | D212-664-141 | CROSSTUBE ASSEMBLY (205/212/412 HIGH FWD) |
| 1 | D6005-128 | CROSSTUBE |
| 2 | D2893-1 | SUPPORT |
| 4 | D3595-063-450 | RUBBER CUSHION |
| 4 | MS21920-25 | CLAMP (OR MS21920-26) |
| A/R | MAGNOBOND 6398 | ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE) |

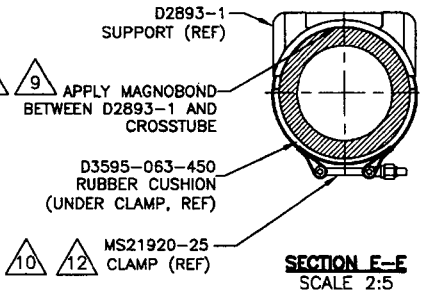
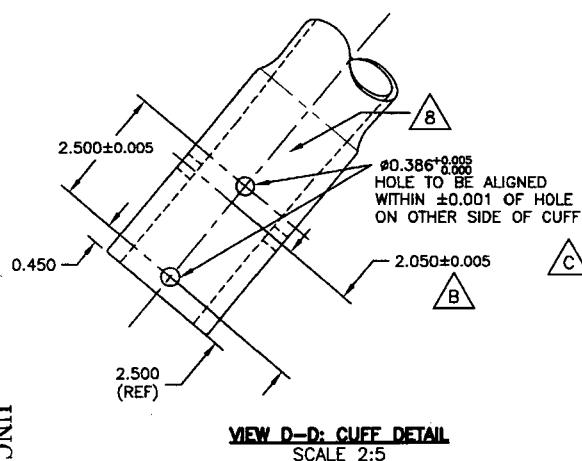
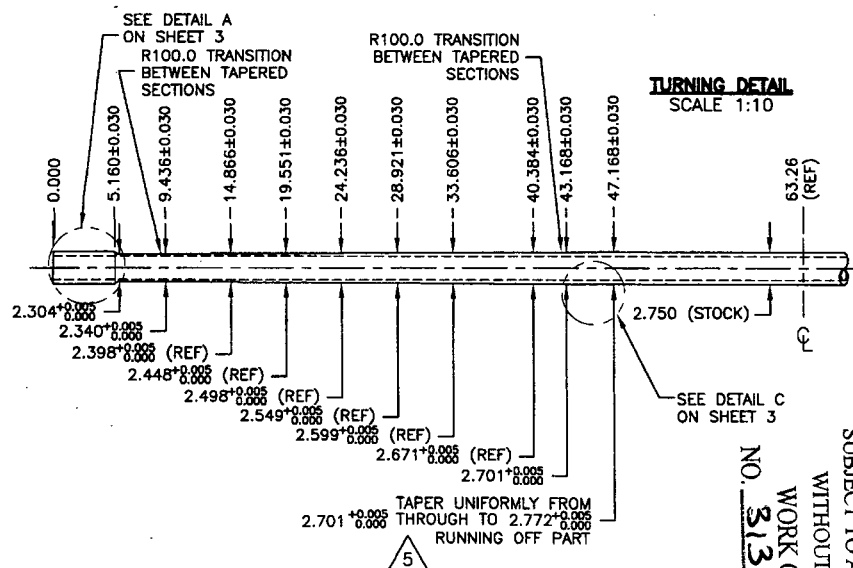
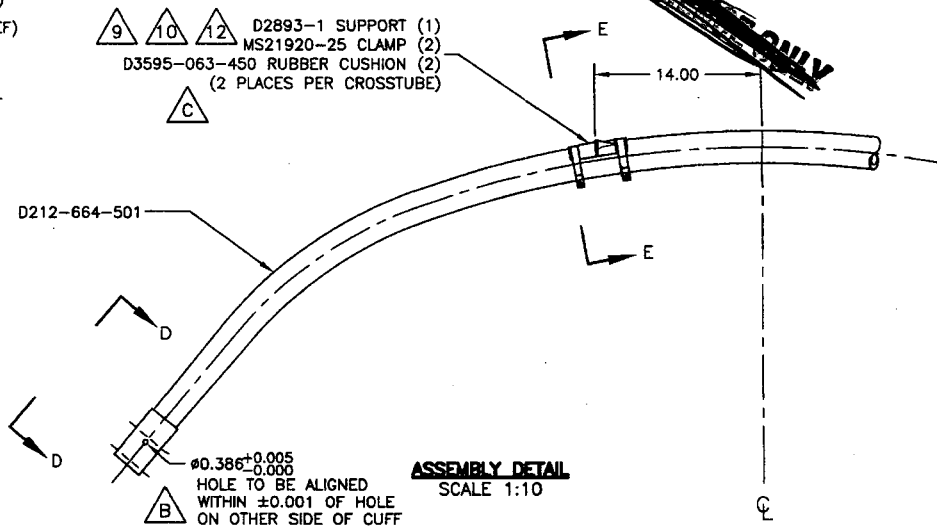
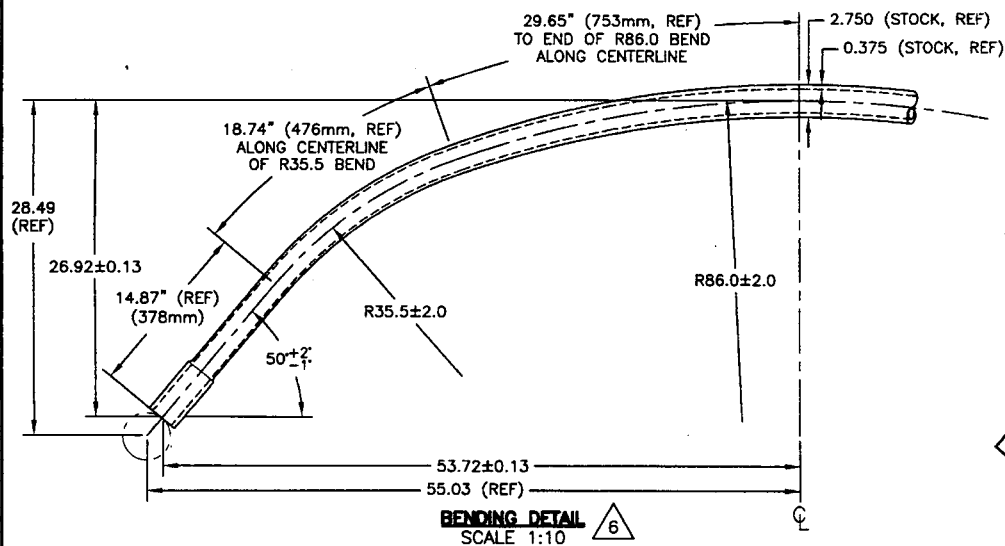
GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 2) MATERIAL: MANUFACTURED FROM D6005-128
FINISHED LENGTH = 126.51±0.020
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 4) PART IS SYMMETRIC ABOUT CENTERLINE.
- 5) RUN-OFF PART. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 6) BEND PROGRESSIVELY WITH A MINIMUM OF 3 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 7) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 8) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS.
- 9) INSTALL D2893-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 10) INSTALL MS21920-25 CLAMPS (OR -26) WITH D3595-063-450 RUBBER CUSHIONS TO SECURE THE D2893-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE OF CROSSTUBE SUPPORT
- 11) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 12) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

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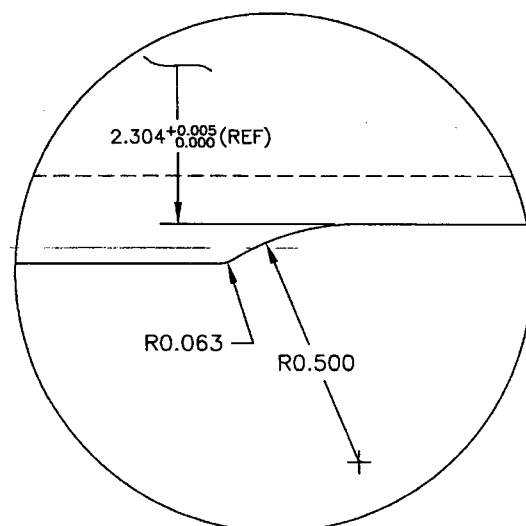
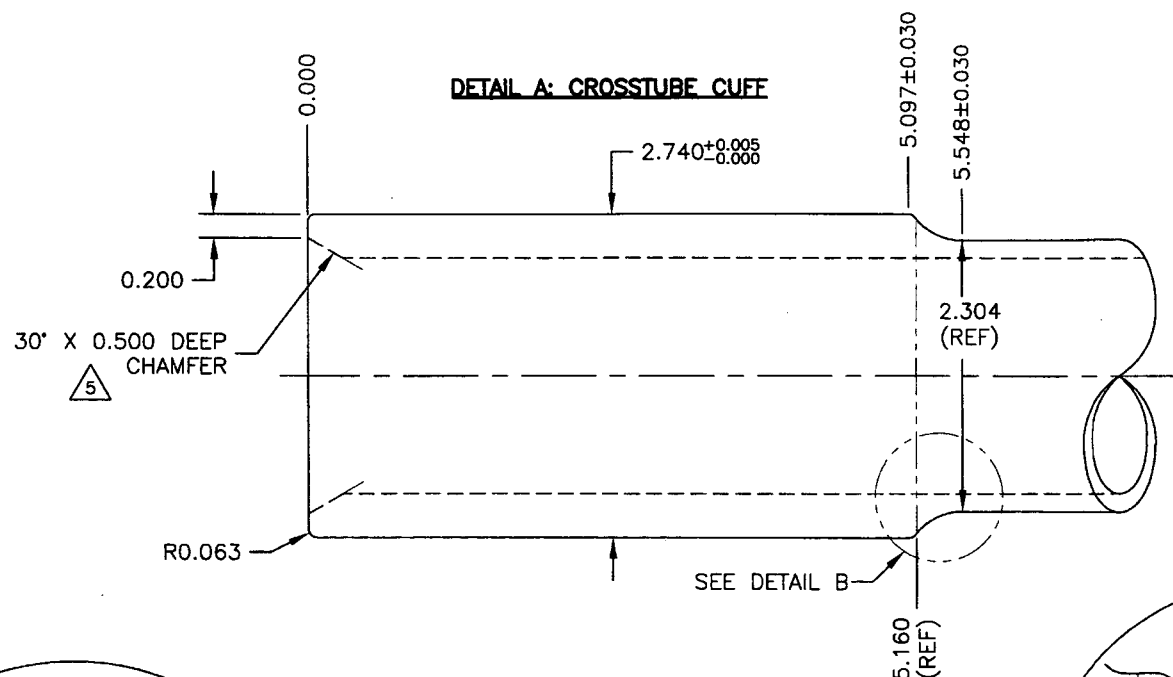


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| | | DATE | 07.03.08 | TITLE | | XTUBE ASS'Y (205/212/412 HI FWD) | SCALE 1:10 |

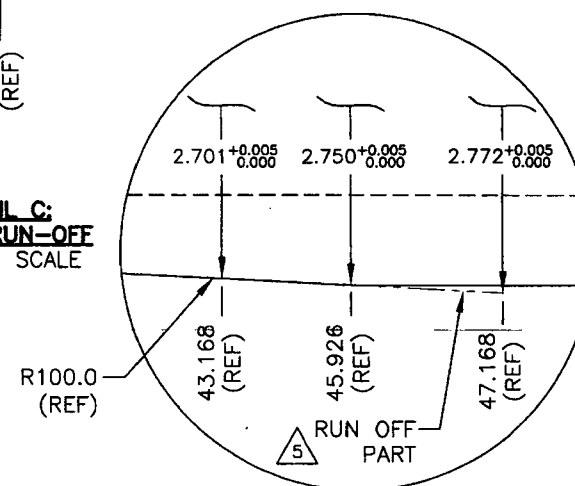
RELEASED
07.04.24 (P)
PER CLN 983

DETAIL A: CROSSTUBE CUFF



**DETAIL B: CUFF
TRANSITION**
SCALE 4:1

**DETAIL C:
TAPER RUN-OFF**
NOT TO SCALE



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| CHECKED J | APPROVED J | DRAWING NO. D212-664-141 | REV. C SHEET 3 OF 3 |
| DATE 07.03.08 | TITLE XTUBE ASS'Y (205/212/412 HI FWD) 1:1 | | |